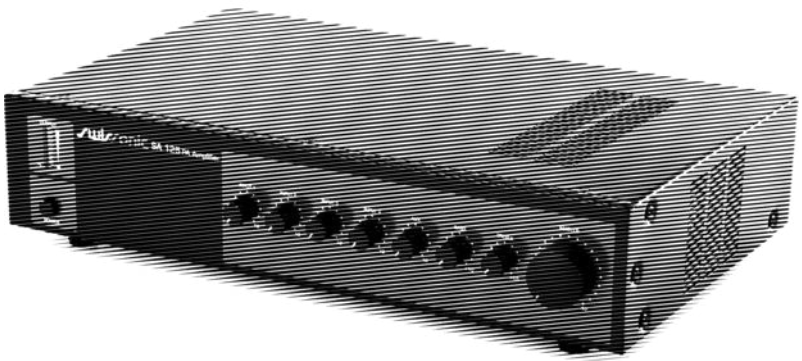
swissonic



SA 125

mixer amplifier

th•mann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – danger zone.

2 Safety notes

Intended use

This device is intended to be used for amplification, mixing and playback of signals from musical instruments and microphones. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by high voltages at the power amplifier output

The output voltages of modern high-performance amplifiers may result in death or serious injury.

Never touch the bare ends of loudspeaker cables when the amplifier is on.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

CAUTION!

Possible hearing damage

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment.

Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.

NOTICE!

Risk of fire

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

NOTICE!

Possible damages by using an external battery

Improper handling may cause an arc or short circuit between the bare ends of a live power cable to an external battery. This can destroy the battery and there is a fire hazard!

If you use an external battery for power supply, connect the power cord to the screw terminal on the rear panel first. Then connect the free ends of the cables to the battery poles. Pay attention to the polarity marking! To disconnect the battery, unscrew the cables on the battery first, then on the terminals of the device.

Also pay attention to the safety instructions of the battery manufacturer.

3 Features

- 4 microphone/line inputs
- 24 V phantom powering
- Priority control
- CD/AUX input
- Input for external pre-amplifier
- Output for external power amplifier
- Screw terminals for loudspeakers and mains-independent voltage supply

4 Installation and operation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

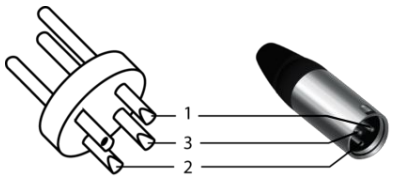
4.1 Pin assignment

You may use XLR connectors with either balanced or unbalanced pinout. Below you will find an overview of the different options.

XLR connectors for signal inputs

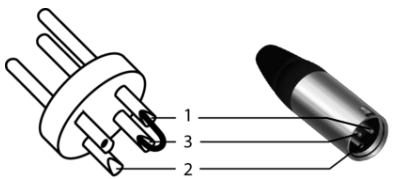
Balanced female XLR panel connectors are used for the signal inputs. The figures and tables show the XLR pin assignment.

Balanced pinout:



1	Ground, shielding
2	Positive signal (+)
3	Negative signal (–)

Unbalanced pinout:

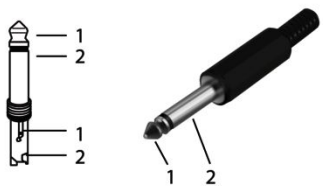


1	Ground, shielding
2	Signal
3	Jumpered with pin 1

Jack plugs for signal inputs

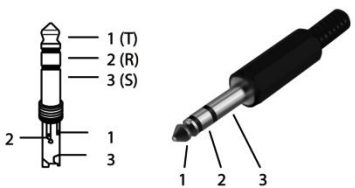
The figures and tables show the pin assignments of the ¼ inch (6.35 mm) jack plugs.

Unbalanced pinout of mono jack plug:

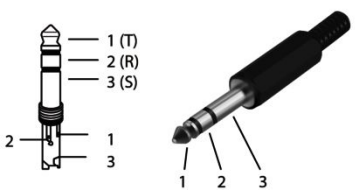


1	Signal
2	Ground, shielding

Unbalanced pinout of stereo jack plug:



1	Signal
2, 3	Ground, shielding



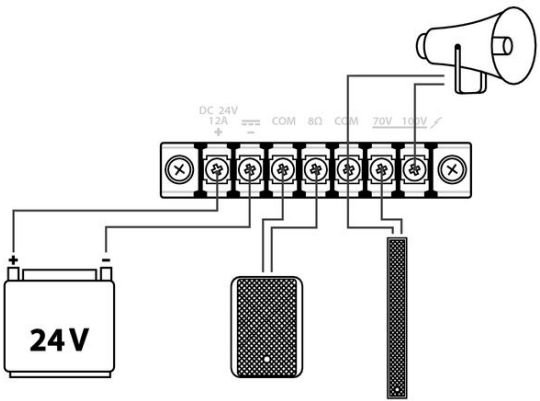
Balanced pinout of stereo jack plug:

1	Positive signal (+)
2	Negative signal (–)
3	Ground, shielding

4.2 Screw terminal strip

All loudspeaker units as well as the battery for mains-independent voltage supply are connected via a screw terminal strip on the rear side of the device.

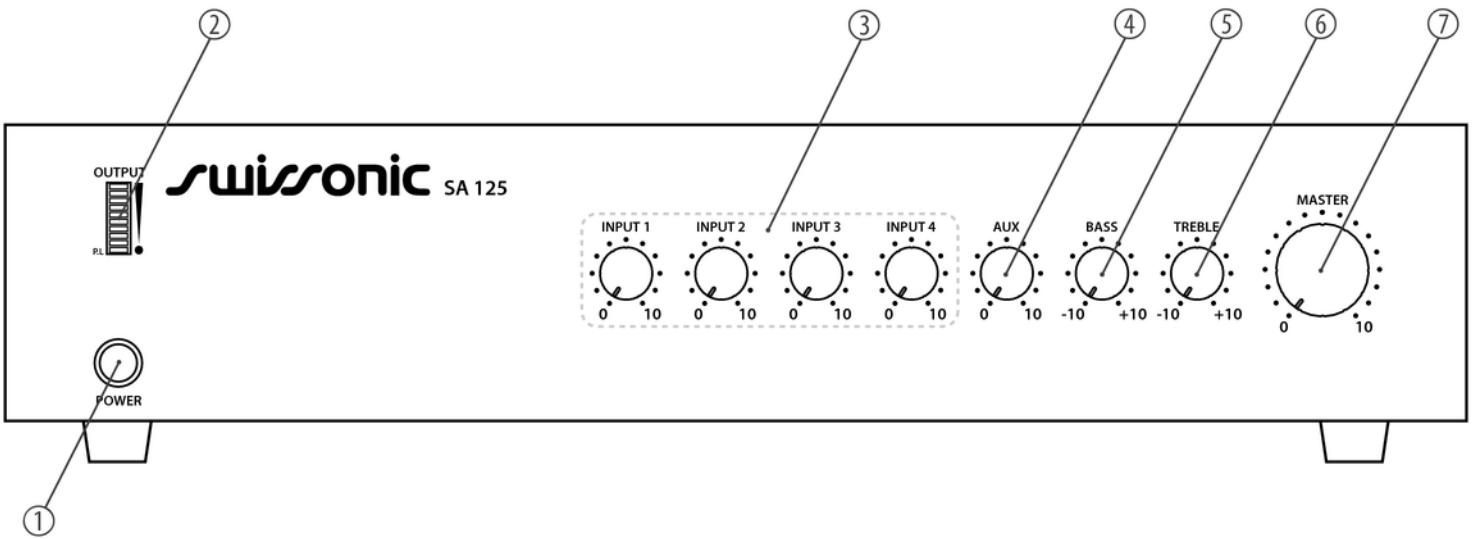
First detach the cover of the screw terminal strip using a suitable screwdriver. Loosen the required screw terminals (see connection diagram) and attach the necessary cables using a suitable screwdriver.



Finally check all cable connections for tightness and reattach the terminal screw strip cover to the device.

5 Connectors and controls

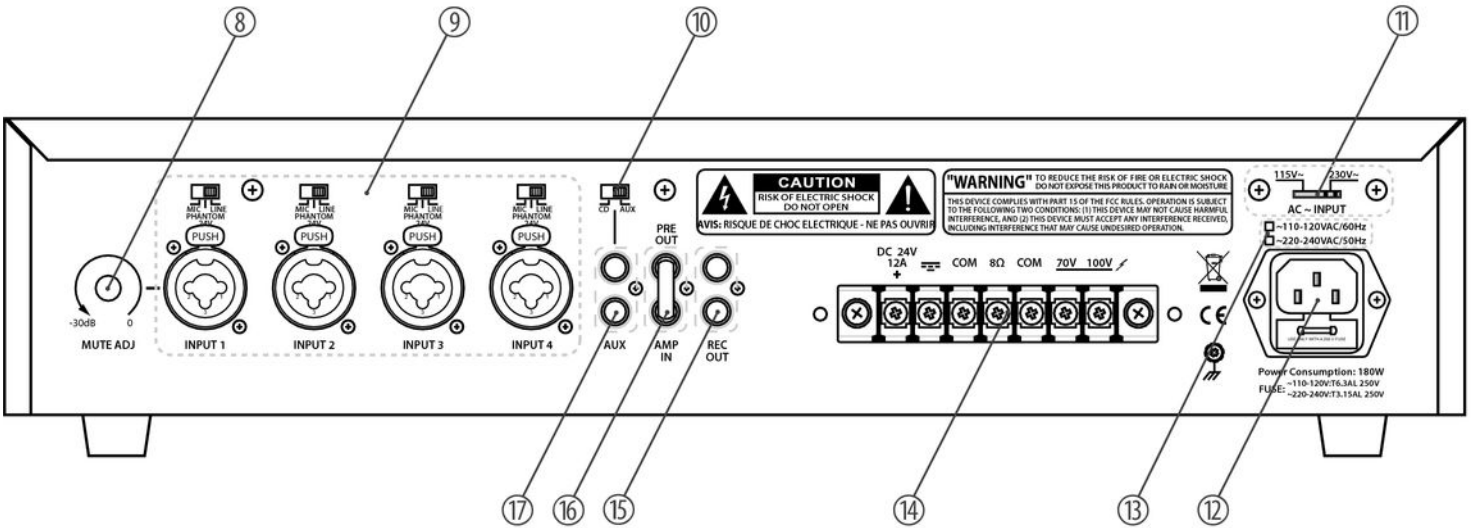
Front panel



1	**POWER** Mains switch to turn the device on/off.
2	**OUTPUT** LED bar graph: The lowermost LED is permenently lit as long as the device is switched on. The upper LEDs indicate the strength of the output signal, depending on the position of the MASTER control.
3	**INPUT 1 – 4** Volume controls for inputs 1 to 4.
4	**AUX** Volume control for the AUX input.
5	**BASS** Control for boosting/cutting the low frequencies (100 Hz). Starting from the neutral position, turn the control knob in clockwise or counterclockwise direction to boost or cut the bass frequencies by up to ± 10 dB.

6	**TREBLE** Control for boosting/cutting the high frequencies (10 Hz). Starting from the neutral position, turn the control knob in clockwise or counterclockwise direction to boost or cut the treble frequencies by up to ± 10 dB.
7	**MASTER** Volume control for the signal output of the mixer amplifier.

Rear panel


8
9
10
11
MUTE ADJ
-30dB
0
INPUT 1
INPUT 2
INPUT 3
INPUT 4
PUSH
MIC LINE PHANTOM 24V
CD AUX
AUX
PRE OUT
AMP IN
REC OUT
CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR
"WARNING" TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
DC 24V 12A
COM 8Ω COM 70V 100V
115V~ 230V~
AC ~ INPUT
~110-120VAC/60Hz
~220-240VAC/50Hz
Power Consumption: 180W
FUSE: ~110-120V:T6.3AL 250V
~220-240V:T3.15AL 250V
17
16
15
14
13
12

8	**MUTE ADJ** Priority control for INPUT 1. This setting controls to which extent the volume levels of the other channels are decreased when an audio or microphone signal is output via channel 1. Use a suitable screwdriver to turn the control knob into the desired position.
9	**INPUT 1 – 4** Signal inputs 1 to 4, designed as lockable combo XLR/jack sockets.
10	**CD – AUX** Signal level selector switch for the AUX input.
11	**AC INPUT** Selector switch for the supply voltage of the device (115 V or 230 V, factory-set value).
12	Plug for mains cable with fuse holder.
13	Label indicating the factory-set supply voltage of the device (115 V or 230 V).
14	Screw terminal strip for connecting an external voltage supply and the loudspeaker system(s), see *Chapter 4.2 'Screw terminal strip' on page 16*.

15	**REC OUT** RCA output jack for connecting an external recording device.
16	**PRE OUT / AMP IN** These two RCA jacks are by default connected directly to each other with a jumper. If desired, they can be used for looping in an external equalizer or compressor or for controlling another power amplifier.
17	**AUX** RCA input jack for connecting an external audio device. Use the CD – AUX selector switch to adjust the signal level.

6 Technical data

Output power	120 W (RMS)
Frequency range	60 Hz … 18 kHz (–3 dB)
Input sensitivity	AUX: –15 dB (unbalanced) CD: –6 dB (unbalanced) MIC: –50 dB (balanced/unbalanced) LINE: –15 dB (balanced/unbalanced)
Sound control	Treble: ± 10 dB, 10 kHz Bass: ± 10 dB, 100 Hz
Total harmonic distortion (THD)	< 0,5 %
Signal-to-noise ratio (SNR)	AUX: ≥ 75 dB MIC: ≥ 65 dB LINE: ≥ 65 dB

Output impedance	COM, 8 Ω
LINE output voltage:	COM, 70 V, 100 V
Priority control	INPUT 1
Controls	INPUT 1 – 4 AUX, BASS, TREBLE, MASTER
Mains power supply	115/230 V ~ (AC), 50/60 Hz 24 V ⎓ (DC)
Power consumption	180 W
Dimensions (W × H × D)	16.92 in × 3.46 in × 10.315 in
Weight	22.05 lb

7 Cleaning

Fan grids

The fan grids of the device must be cleaned on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.

8 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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